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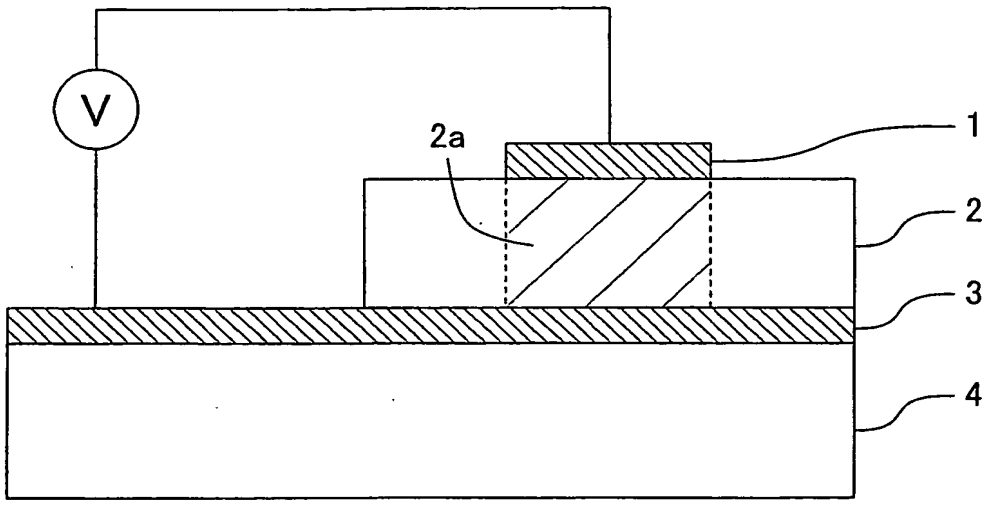
(54) Title: MEMORY DEVICE, MEMORY CIRCUIT AND SEMICONDUCTOR INTEGRATED CIRCUIT HAVING VARIABLE RESISTANCE



(57) Abstract: A first variable resistor (5) is connected between a first terminal (7) and a third terminal (9) and increases/reduces its resistance value in accordance with the polarity of a pulse voltage applied between the first terminal (7) and the third terminal (9). A second variable resistor (6) is connected between the third terminal (9) and a second terminal (8) and increases/reduces its resistance value in accordance with the polarity of a pulse voltage applied between the third terminal (9) and the second terminal (8). Given pulse voltages are applied between the first terminal (7) and the third terminal (9) and between the third terminal (9) and the second terminal (8) to reversibly change the resistance values of the first and second variable resistors (5, 6), thereby recording one bit or multiple bits of information.

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